

REMARKS

Applicants reaffirm the election of claims 1-17 and acknowledge withdrawal of claims 18-33.

With regard to the rejection of claims 1-3, 5, 6 and 11 under 35 U.S.C. § 112, second paragraph, applicants respectfully disagree. Applicants first point out that each of these claims is governed by the term "comprising," which appears in each respective preamble. This is not Markush language. Even so, alternative expressions are allowed within the Markush framework. The Examiner is referred to MPEP § 2173.05(h), which states, "Alternative expressions are permitted if they present no uncertainty or ambiguity with respect to the question of scope or clarity of the claims." Applicant respectfully suggests that there is only one reasonable interpretation of the phrase, "incorporating at least one of an oil and a fat component and said fermented soy composition." Use of the inclusive term "comprising" means that the terms "oil" and "fat" in claim 1 can be independently either singular or plural and that, at a minimum, either at least one oil or at least one fat is incorporated. The "said fermented soy composition" is defined in previous elements of these claims, so the clear meaning is to incorporate new materials with it, not to incorporate the composition into itself. Claims 1 and 11 are not indefinite, and the corresponding rejections should be withdrawn.

Similar arguments apply to dependent claims 2, 3, 5 and 6. In claim 3, the phrase, "at least one of a food grade acid and a salt of said acid" means that, at a minimum, either at least one food grade acid or at least one salt of the food grade acid is included in the aqueous soy composition. Both a food grade acid and a salt of the acid could be included. Either or both of "food grade acid" or "salt of said acid" could be, but need not be, plural. Claims 5 and 6 require, at a minimum, either at least one sufficient time or at least one sufficient temperature. The claim 5 (6) language could be satisfied by any time(s), any temperature(s), or any combination(s) thereof that are sufficient to

discontinue fermentation (provide a substantially aseptic sour cream composition). These claims are not indefinite, and each rejection should be withdrawn.

With regard to claim 16, the Examiner is referred to the discussion of the term "effective amount" within MPEP § 2173.05(c). Applicants believe that the term "effective amount" is for the present purpose equivalent to the term "sufficient" as it is used in claim 16 to refer to the amount of fat component to be incorporated with the fermented composition. The MPEP states, "The proper test [of whether or not the phrase is indefinite] is whether or not one skilled in the art could determine specific values for the amount based on the disclosure." The amount of fat component needed in these compositions to provide a sour cream is clearly expressed in applicants' specification. Please refer to pages 2, 10, 12 and 13 of the specification. Claim 16 is not indefinite, and the rejection should be withdrawn.

Applicants respectfully disagree with the rejection of claims 1, 2, 4-12, and 14-17 under 35 U.S.C. § 102(b) as being anticipated by Marshall, et. al, U.S. Patent No. 4,678,673 ("the '673 patent"). The '673 patent describes a fermentation that takes place in a temperature range "from about 75°F to about 90°F being particularly preferred" (col. 5, ll. 9-13). As understood in the art, such fermentation temperatures indicate use of mesophilic bacteria. In contrast, thermophilic bacteria are understood to function at temperatures much higher than those cited in the '673 patent. See, e.g., a pertinent discussion presented by the Dairy Research and Information Center at the University of California/Davis, a copy of which is attached hereto as Exhibit A and incorporated herein by reference. The bacteria recommended in the '673 patent for use in such fermentations cannot be considered thermophilic, as defined in the art. Thus, the '673 patent does not anticipate applicants' claims 1, 2, 4-12, and 14-17, and the rejections should be withdrawn, with the subject claims allowed to proceed toward issue.

Regarding claims 3 and 13, applicants respectfully disagree with their rejection under 35 U.S.C. § 103(a) as being unpatentable over the '673 patent in view of Tsumura,

et. al, U.S. Patent No. 3,857,970 ("the '970 patent"). The '673 patent teaches away from the '970 patent in important ways. The '673 patent is directed to the preparation of cream cheese, while the '970 patent is directed to the preparation of cheese. After the fermentation of the '970 patent has sufficiently progressed, coagulation is induced by addition of an organic lactone ('970 patent, col. 4, l. 67 to col. 5, l. 14). The method of cream cheese preparation of the '673 patent does not involve addition of a coagulating agent. Cheese is made through an aging process that involves microbial action that continues over the aging period. The cream cheese formulation of the '673 patent is subjected to pasteurization following fermentation, and the '673 patent does not teach that an aging period is necessary. While the cheese curd may be subjected to a cooking step after coagulation, this is done at mild temperatures, and the intent is to force water out rather than to substantially deactivate the bacteria.

In further consideration of the Examiner's objection to claim 3, applicants respectfully point out that there is no reference within the '970 patent, in col. 2 or anywhere else, to a "soaked whole soybean slurry" or specifically to the use of "a dry whole soybean particulate" to make said slurry. As the Examiner points out, the '673 patent does not teach the use of a dry whole soybean particulate to make soy milk. Thus, this teaching is entirely absent from the combination of the '673 patent with the '970 patent. Also, MPEP § 2144.06 states, "In order to rely on equivalence as a rationale supporting an obviousness rejection, the equivalency must be recognized in the prior art, and cannot be based on applicants' disclosure or the mere fact that the components at issue are functional or mechanical equivalents." Section 103 requires that obviousness be determined on the basis of the claimed "subject matter as a whole." This rejection is based on less than the entire claimed subject matter. Accordingly, there is no *prima facie* obviousness. The rejection of claim 3 should be withdrawn, with this claim allowed to proceed toward issue.

Regarding claim 13, it is dependent upon claim 11 and therefore cannot be obvious in view of the prior art deficiencies regarding claim 11. (A similar argument applies to claim 3.) The '970 patent teaches that the fermentation should take place at 50C, or 122°F (col. 6, ll. 3-6), while the '673 patent teaches that the fermentation described there should take place at 75-90°F ('673 patent, col. 5, ll. 9-13). One skilled in the art would not feel motivated to combine seemingly incompatible procedures. Again, this rejection is based on less than the entire claimed subject matter. There is no *prima facie* obviousness. The rejection of claim 13 should be withdrawn, with this claim allowed to proceed toward issue.

This application is believed to be in condition for allowance. Consistent therewith, favorable action is respectfully requested. The Examiner is invited to contact the undersigned by telephone or e-mail should any issue remain. Thank you for your time and consideration.

Respectfully submitted:


Michael A. Van Lente
Michael A. Van Lente
Agent for Applicant
Registration No. 52,314

Reinhart Boerner Van Deuren s.c.
1000 North Water Street, Suite 2100
Milwaukee, WI 53202
(414) 298-8158
Customer No. 22922

Different Bacteria have Different Temperature Requirements

Bacteria like different temperatures for growth. The largest and most common group is called mesophilic (mess-o-fill'-ik). These bacteria are somewhat like people in that they prefer moderate temperatures for growth. With this group the "best"--that is, the most rapid growth is around 70 to 98 degrees. The precise "best" growth does vary with the species of bacteria. The mesophiles can also grow down to 45 degrees and up to 110 degrees, but do so more slowly.

In the bacterial world, some like it hot! These bacteria live and multiply best at approximately 130 degrees F. but can grow anywhere between 110 and 190 degrees F. They are referred to as the thermophilic (ther-mo-fill'-ik) group.

Contrary to the belief of some people, cold or freezing does not always kill bacteria. In most cases it just stops or slows down their growth. Extended freezing, however, will slowly kill them. Psychrophilic (sigh-crow-fill'-ik) bacteria will grow from 32 to 90 degrees F. with most having their "best" growth around 50 to 70 degrees. Because they grow better NOT best than the mesophilic bacteria at refrigerated temperatures--32 to 45 degrees--, this group is most often responsible for spoilage in refrigerated foods.

So how does one control bacterial growth with temperature. If you have a food that is given a "light" heat treatment, like pasteurization, the food must be kept cold so that the growth of any spoilage bacteria surviving the pasteurization process is slowed. (The pasteurization process is designed to kill all pathogens, but not all spoilage bacteria). Obviously cold storage does not stop all bacterial growth since spoilage does eventually occur. But the colder you store the product the longer it will take for the spoilage bacteria to grow and spoil the food. In the dairy and perishable food industries we say, "Life begins at 40"--(degrees, that is). Keep the food at 40 or less and you will get the shelf life you need with a properly processed food.

EXHIBIT A